

## **Appendix B**

### **Prefinal Inspection Report for the Central Facilities Area-04 Mercury Pond Remedial Action**

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## **Appendix B**

### **Prefinal Inspection Report for the Central Facilities Area-04 Mercury Pond Remedial Action**

#### **B-1. PREFINAL INSPECTION CHECKLIST**

The completed “Draft Prefinal Inspection Checklist” for the remedial action at the CFA-04 mercury pond is included in Attachment B1.

#### **B-2. DISCUSSION OF FINDINGS**

The prefinal inspection occurred on October 16, 2003. A summary of the prefinal inspection is included in Attachment B2. Three action items were identified:

- Provide survey results on area in Zone 6 near Sampling Point 6-3. The Environmental Protection Agency (EPA) did not believe that the excavated area is 10 ft deep or at basalt. The EPA said this is a quality assurance check on how the excavation went.
- E-mail photos to the EPA and the Idaho Department of Environmental Quality (DEQ) that were taken during the inspection.
- Provide a printout of the last calibration of the field Atomic Absorption (AA) instrument.

In conference calls with the Agencies on October 22, 2003, the EPA and DEQ identified the following findings:

1. Soil was not removed to the extent practicable at Sampling Point 6-3 (Inspection Checklist Item 4) from on top of the basalt. Soil had been removed from this deep narrow area with a large backhoe that had 10-in. teeth to the extent that the backhoe was capable. The EPA maintained that hand-removal should be used in this area in order to remove the soil to the extent practicable.
2. Ten percent of the field samples taken, instead of 10% of the minimum number of samples required, should have been collected and sent to an off-site laboratory for a quality control analysis (Inspection Checklist Item 9). Ten percent of the minimum number of quality control samples required (five samples based on a minimum of 45 samples) had already been collected and sent off-site for analysis. It was agreed that the random collection of samples identified in the *Field Sampling Plan for the Central Facilities Area-04 Pond Remedial Action* (DOE-ID 2003) (Field Sampling Plan) should be performed instead of what is prescribed in the *Quality Assurance Project Plan for Waste Area Groups 1, 2, 3, 4, 5, 6, 7, 10, and Inactive Sites* (DOE-ID 2002) (QAPjP). The QAPjP (DOE-ID 2002) requires collecting three quality control samples that are above the action level. The collection of samples per the QAPjP (DOE-ID 2002) could not be performed since soil from previous screening sampling had been disposed of. In addition, a very small fraction (3 out of 74 samples) of the previous screening samples were above the final remediation goal (FRG) or action level. One quality check sample above the FRG had already been taken.

## B-3. CORRECTIVE ACTION

The information in Items 1–3 above was provided to the EPA and DEQ on October 20, 2003 (see Attachment B3). In a conference call on October 22, 2003, the following corrective actions were agreed to:

1. Excavate further at Sampling Point 6-3 in Zone 6 with hand methods if necessary. Take pictures of the excavated area before and after the excavation. Collect and analyze a field sample at this location after the additional soil is removed (Inspection Checklist Item 4).
2. Collect three more quality control samples at random as specified in the Field Sampling Plan (DOE-ID 2003) with a split analyzed with field instrumentation and the other split sent off-site for analysis (Inspection Checklist Item 9).

The following corrective actions were performed:

1. On October 23, 2003, an additional 4 yd<sup>3</sup> of soil were excavated from Sampling Point 6-3. On October 27, 2003, three additional samples were collected at random locations (C-6, C-7, C-8) with a split analyzed with field instrumentation and the other split sent off-site for laboratory analysis.
2. On October 28, Bechtel BWXT Idaho, LLC (BBWI) decided to remove an additional 35.9 yd<sup>3</sup> from Sampling Point 6-3 in order to better expose the basalt (Inspection Checklist Item 3). Pictures were taken before the excavation on October 23 and after this final excavation (see Attachment B4). On October 27, 2003, a field sample was collected at Sample Point 6-3 on top of the basalt and analyzed (52 mg/kg mercury).
3. On October 27, 2003, C-8 was resampled in order to get a true 0-6-in. sample instead of a surface sample with a split analyzed with field instrumentation and the other split sent off-site for analysis (Checklist Item 9). See Attachment B1.1 of Attachment B1 for the final analytical results based on field analysis and the recalculated 95% UCL (Inspection Checklist Item 8).

## B-4. REFERENCES

DOE-ID, 2002, *Quality Assurance Project Plan for Waste Area Groups 1, 2, 3, 4, 5, 6, 7, 10, and Inactive Sites*, DOE/ID-10587, Rev. 7, September 2002.

DOE-ID, 2003, *Field Sampling Plan for the Central Facilities Area-04 Pond Remedial Action*, DOE/ID-11024, Rev. 0, February 2003.

## B-5. ATTACHMENTS

- Attachment B1 Prefinal Inspection Checklist
  - Attachment B1.1 of Attachment B1 – CFA-04 Confirmation Sampling Summary
  - Attachment B1.2 of Attachment B1 – INEEL Waste Determination and Disposition Forms
- Attachment B2 Summary of CFA-04 Prefinal Inspection

- Attachment B3 Responses to EPA/DEQ Requests for Information during the Prefinal Inspection
  - Attachment B3.1 - Logbook Entry
  - Attachment B3.2 - Prefinal Inspection Pictures
  - Attachment B3.3 - Field Analyzer Calibration
- Attachment B4 Pictures of Sample Point 6-3 excavation
  - Attachment B4.1 - Pictures of Sample Point 6-3 prior to excavation
  - Attachment B4.2 - Pictures of Sample Point 6-3 after excavation



**Attachment B1**

**Finalized Prefinal Inspection Checklist**



Table B1-1. Prefinal inspection checklist

Inspection Item	Reference	Satisfactory	Unsatisfactory	Comments
1. CFA-04 construction site cleared of vegetation if required to mitigate potential fire hazard	Work Plan Section 5.3.4 <sup>a</sup>	X		Done.-
2. Asbestos-containing material excavated, removed, and disposed of in accordance with the INEEL Waste Acceptance Criteria <sup>b</sup>	Work Plan Section 5.3.6 <sup>a</sup>	X		Done.
3. Mercury-contaminated soil with total mercury concentrations above 8.4 mg/kg and TCLP mercury concentrations less than 0.2 mg/L excavated and hauled to the CFA landfill for disposal.	Work Plan Section 5.3.7 <sup>a</sup>	X		Done.
4. Low-level mercury-contaminated soil with total mercury concentrations greater than 8.4 mg/kg and TCLP mercury concentrations less than 0.2 mg/L and radionuclide concentrations exceeding the INEEL Waste Acceptance Criteria <sup>b</sup> excavated and hauled to the ICDF for disposal.	Work Plan Section 5.3.7 <sup>a</sup>	X		Done. The final additional soil was satisfactorily excavated at Sampling Point 6-3 per a prefinal inspection finding on 10-16-03.
5. Low-level TCLP mercury-contaminated soil with total mercury concentrations greater than 8.4 mg/kg and TCLP concentrations greater than 0.2 mg/L excavated and hauled to the ICDF for disposal at the ICDF.	Work Plan Section 5.3.7 <sup>a</sup>	X		Done.
6. Calcine-filled bottles that exceed 260 mg/kg and 0.2 mg/L TCLP mercury packaged and shipped off-site for treatment and disposal.	Work Plan Section 5.3.7 <sup>a</sup>	NA	NA	Not applicable
7. Field Samples collected and analyzed to direct excavation and to be used for confirmation sampling	Field Sampling Plan Section 4.2.2 <sup>c</sup>	X		Done. See Attachment B1.1 for individual field sampling results – includes field analytical results of quality control samples (C-1 through C-8) with samples C-5 through C-8 added per a pre-final inspection finding on 10-16-03.
8. 95% UCL calculated using field sampling data and compared to the final remediation goal	Field Sampling Plan 3.1.7.1 <sup>c</sup>	X		Done. See Attachment B1.1 – includes field analytical results of quality control samples (C-1 through C-8) with samples C-5 through C-8 added per a pre-final inspection finding on 10-16-03.
9. Quality control samples collected and analyzed at an off-site laboratory	Field Sampling Plan Section 4.2.2 <sup>c</sup>	X		Done. Samples sent to laboratory – three additional samples were satisfactorily taken per a prefinal inspection finding on 10-16-03
10. Off-site laboratory analytical data received, validated and entered into ERIS.	Field Sampling Plan <sup>c</sup>	X		Done. See Appendix C for sampling results.
11. Validated analytical data transmitted to DOE Idaho, DEQ, and EPA	FFA/CO <sup>d</sup>	X		Done. See letter ICDF-05-04 CCN #47752, dated 02-03-04.

Table B1-1. (continued).

Inspection Item	Reference	Satisfactory	Unsatisfactory	Comments
12. Hazardous waste designated and characterized using process knowledge, historical analytical data, and/or analytical data generated during the course of remediation activities.	Work Plan Appendix E <sup>a</sup>	X		Done. See attached INEEL Waste Determination & Disposition Forms (Attachment B1.2)
13. Fence removed	Work Plan Section 5.3.3 <sup>a</sup>	X		Done.
14. Excavation backfilled to excavation grade and contour smoothed.	Work Plan Section 5.3.11 Appendix B Section 0200-Earthwork <sup>a</sup>	X		Done. See photographic record, Appendix D.
15. Reclamation seeding with wood chip mulch performed in all disturbed areas.	Work Plan Section 5.3.11 Appendix B Section 02486-Revegetation <sup>a</sup>	X		Done. See photographic record, Appendix D.
16. Certified seed mix used in reclamation seeding.	Work Plan Appendix B Section 01005-Summary of Work, Vendor Data Schedule <sup>a</sup>	X		Done.
17. Soil analyzed to determine appropriate fertilizer mix and applicable fertilizer applied.	Work Plan Appendix B Section 01005-Summary of Work, Vendor Data Schedule <sup>a</sup>	X		Done.
18. Equipment decontaminated and contaminated materials properly stored and disposed of.	Work Plan Appendix B Section 02200-Earthwork <sup>a</sup>	X		Done.
19. Equipment removed from the site. Decontamination pads and temporary barriers and signs removed and dispositioned appropriately.	Work Plan Section 5.3.12 <sup>a</sup>	X		Done.
20. Topographical survey completed	Work Plan Appendix B Section 01005-Summary of Work, 01051-Construction Surveying and Staking, Vendor Data Schedule <sup>a</sup>	X		Done. See Appendix G.
21. As-built drawings depicting final construction completed.	Work Plan Appendix B Section 01005-Summary of Work, Vendor Data Schedule <sup>a</sup>	X		Done. See Appendix G.

Table B1-1. (continued).

Inspection Item	Reference	Satisfactory	Unsatisfactory	Comments
a. DOE-ID, 2003, <i>Waste Area Group 4 Remedial Design/Remedial Action Work Plan, CFA-04 Pond Mercury-Contaminated Soils, Operable Unit 4-13</i> , DOE/ID-11028, Rev. 0, February 2003.				
b. DOE-ID, 2003, <i>Idaho National Engineering and Environmental Laboratory Waste Acceptance Criteria, DOE/ID-01-10381</i> , Rev. 18, May 2003.				
c. DOE-ID, 2003, <i>Field Sampling Plan for the Central Facilities Area-04 Pond Remedial Action</i> , DOE/ID-11024, Rev. 0, February 2003.				
d. DOE-ID, 1991, <i>Federal Facility Agreement and Consent Order for the Idaho National Engineering Laboratory</i> , Administrative Docket No. 1088-06-29-120, U.S. Department of Energy Idaho Field Office; U.S. Environmental Protection Agency, Region 10; Idaho Department of Health and Welfare, December 4, 1991.				
CFA = Central Facilities Area DEQ = Idaho Department of Environmental Quality EPA = Environmental Protection Agency ERIS = Environmental Restoration Information System ICDF = INEEL CERCLA Disposal Facility INEEL = Idaho National Engineering and Environmental Laboratory TCLP = toxicity characteristic leaching procedure UCL = upper confidence limit				



**Attachment B1.1**

**CFA-04 Confirmation Sampling Summary**



## B1.1 CFA-04 CONFIRMATION SAMPLING SUMMARY

Field samples were collected during the remedial activities at the CFA-04 mercury pond. The field samples were collected at random locations at a depth ranging from 0 to 6 in.. The samples were analyzed for total mercury on-Site using an atomic absorption spectrometer. After collection and analysis, the 95% upper confidence level on the mean was calculated, and the data were tested for normality. Normality was established through use of the Shapiro-Wilk (SW) statistic and its associated p-value for the non-transformed transformed data using two methods: 1) natural logarithm transform, and 2) square root transform. Because the natural log and square root cannot handle negative values, 0.11 was added to every data point. This does not change the testing of normality. The data set with the highest S-W statistic and lowest p-value was then selected as the data set for further analysis. While they do not achieve strict normality, there is a marked improvement when using the natural log transformation. The slight departure from normality has little effect on the analysis results. The S-W statistics and p-values are in the attached spreadsheets (Tables B1.1-1 and B1.1-2).

The results of the statistical analyses are that the 95% UCL for the “with pipe” data is 0.425 and for the “without pipe” data is 0.377. The transformed value of the final remediation goal is  $\ln(8.4+0.11) = 2.14$ . Therefore, at a 95% confidence level, it can be concluded that the average mercury contamination “with” or “without” the pipe is less than the final remediation goal.

Table B1.1-1. Mercury data without sample from under pipe.

Location	conc	conc+.11	ln(conc+.11)	sqrt(conc+.11)	SW statistic	p-value
ZONE 11-13	5.24	5.35	1.677	2.313	conc+.11	0.44271 <0.00001
ZONE 11-14	6.10	6.21	1.826	2.492	ln(conc+.11)	0.95091 0.00483
ZONE 11-15	0.14	0.25	-1.382	0.501	sqrt(conc+.11)	0.80723 <0.00001
ZONE 11-16	0.61	0.72	-0.326	0.850		
ZONE 11-17	5.49	5.60	1.723	2.366		
ZONE 11-18	8.03	8.14	2.097	2.853		
ZONE 11-19	0.19	0.30	-1.201	0.549		
ZONE 11-20	1.86	1.97	0.678	1.404		
ZONE 12-1	30.00	30.11	3.405	5.487		
ZONE 12-2	0.48	0.59	-0.531	0.767		
ZONE 12-3	7.99	8.10	2.092	2.846		
ZONE 12-4	8.15	8.26	2.111	2.874		
ZONE 12-5	5.82	5.93	1.780	2.435		
ZONE 12-6	2.76	2.87	1.054	1.694		
ZONE 13-1	0.30	0.41	-0.892	0.640		
ZONE 13-2	1.18	1.29	0.255	1.136		
ZONE 13-3	4.07	4.18	1.430	2.045		
ZONE 13-4	0.85	0.96	-0.046	0.977		
ZONE 13-5	4.92	5.03	1.615	2.243		
ZONE 13-6	2.10	2.21	0.793	1.487		
ZONE 13-7	2.95	3.06	1.118	1.749		

Table B1.1-1. (continued).

Location	conc	conc+.11	ln(conc+.11)	sqrt(conc+.11)
ZONE 14-1	4.21	4.32	1.463	2.078
ZONE 14-10	0.12	0.23	-1.492	0.474
ZONE 14-11	6.60	6.71	1.904	2.590
ZONE 14-2	2.82	2.93	1.075	1.712
ZONE 14-3	2.96	3.07	1.122	1.752
ZONE 14-9	0.25	0.36	-1.036	0.596
ZONE 2-1	0.20	0.31	-1.171	0.557
ZONE 2-10	-0.10	0.01	-4.605	0.100
ZONE 2-11	1.90	2.01	0.698	1.418
ZONE 2-12	0.60	0.71	-0.342	0.843
ZONE 2-13	4.00	4.11	1.413	2.027
ZONE 2-14	0.00	0.11	-2.207	0.332
ZONE 2-15	0.60	0.71	-0.342	0.843
ZONE 2-16	0.00	0.11	-2.207	0.332
ZONE 2-17	-0.10	0.01	-4.605	0.100
ZONE 2-18	-0.10	0.01	-4.605	0.100
ZONE 2-19	0.20	0.31	-1.171	0.557
ZONE 2-2	0.00	0.11	-2.207	0.332
ZONE 2-20	0.10	0.21	-1.561	0.458
ZONE 2-21	0.50	0.61	-0.494	0.781
ZONE 2-22	4.90	5.01	1.611	2.238
ZONE 2-23	2.90	3.01	1.102	1.735
ZONE 2-3	0.00	0.11	-2.207	0.332
ZONE 2-4	1.80	1.91	0.647	1.382
ZONE 2-5	-0.10	0.01	-4.605	0.100
ZONE 2-6	0.00	0.11	-2.207	0.332
ZONE 2-7	-0.10	0.01	-4.605	0.100
ZONE 2-8	0.10	0.21	-1.561	0.458
ZONE 2-9	4.80	4.91	1.591	2.216
ZONE 5-1	0.7	0.81	-0.211	0.900
ZONE 5-2	4.8	4.91	1.591	2.216
ZONE 5-3	1.1	1.21	0.191	1.100
ZONE 5-4	16	16.11	2.779	4.014
ZONE 5-5	0.7	0.81	-0.211	0.900
ZONE 5-6	3.1	3.21	1.166	1.792
ZONE 5-7	0.6	0.71	-0.342	0.843
ZONE 6-1	0.7	0.81	-0.211	0.900
ZONE 6-2	1.9	2.01	0.698	1.418
ZONE 6-4	7.2	7.31	1.989	2.704
ZONE 7-11	0.1	0.21	-1.561	0.458
ZONE 7-12	0.5	0.61	-0.494	0.781

Table B1.1-1. (continued).

Location	conc	conc+.11	ln(conc+.11)	sqrt(conc+.11)
ZONE 7-13	0	0.11	-2.207	0.332
ZONE 7-14	0.1	0.21	-1.561	0.458
ZONE 8-13	1.5	1.61	0.476	1.269
ZONE 8-14	1.8	1.91	0.647	1.382
ZONE 8-18	1.6	1.71	0.536	1.308
ZONE 8-19	2.3	2.41	0.880	1.552
ZONE 8-20	6.7	6.81	1.918	2.610
C-1	0.1	0.21	-1.561	0.458
C-2	0.1	0.21	-1.561	0.458
C-3	1.6	1.71	0.536	1.308
C-4	7.1	7.21	1.975	2.685
C-5	25.5	25.61	3.243	5.061
C-6	0.1	0.21	-1.561	0.458
C-7	3.7	3.81	1.338	1.952
C-8	60	60.11	4.096	7.753



## **Attachment B1.2**

### **INEEL Waste Determination and Disposition Forms**



## Attachment B1.2

435.39  
03/03/2000  
Rev. 04

### INEEL WASTE DETERMINATION & DISPOSITION FORM (WDDF)

Pg 1 of 4

General Instructions:	Non-hazardous Soils from CFA-04 Pond		
Waste Stream Name:			
WDDF Number (Optional):			

Charge #: 100 315 4T

## WORKING COPY

**ONLY** Profile Number: 3801Q

Waste Stream Contacts			
Contact:	Name	E-Mail	Phone
Generator:	Deborah W. Wagoner	wigg	6-9889 7659
Facility Rep.:	Robert A. Lopez	rlz	6-8008 6403
		4142	Independent Reviewer:
<b>SECTION I: PROCESS KNOWLEDGE EVALUATION</b> (Completed by the generator with assistance from the Facility Representative)			
1. Waste Generation Location: Facility: CFA	Building/Room: NA	Area: WAG-4	If applicable: Container #: _____
2. Process and Waste Description: (Attachment Included: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No)	Soils generated from the remediation of CFA-04 pond. Mercury is the contaminant of concern for this area. These soils are from zones 11, 12, 13 and 14. Sampling of these soils gave a total mercury concentration of up to 77.1 mg/kg. Subsequent sampling for TCLP mercury did not exceed 50 ug/L. Therefore, these zones would not be considered hazardous for mercury. Radioisotopes are present at the normal INEEL background level and fall within the parameters defined in TPR-713.		
3. Were any waste minimization activities a part of this process: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (if Yes, provide description or reference.)			
4. Generation Status: <input checked="" type="checkbox"/> Anticipated <input type="checkbox"/> Existing <input type="checkbox"/> Routine operations <input checked="" type="checkbox"/> Cleanup/Stabilization Activities <input checked="" type="checkbox"/> One Time Only <input type="checkbox"/> On-going <input type="checkbox"/> Secondary			
5. Other generation information: N/A			
6. Physical Description (check all that apply): Color: <input checked="" type="checkbox"/> Solid <input type="checkbox"/> Organic Liquid <input type="checkbox"/> Aqueous Liquid <input type="checkbox"/> Sludge <input type="checkbox"/> Aerosol <input type="checkbox"/> Gas Cylinder <input type="checkbox"/> Multi-Layered			
7. Sources used for process evaluation (e.g. MSDS, operational logs, procedures, analyses): analytical data			
8. Waste Characteristics: Note: The waste characteristics may not be known at time of initial determination. If required for treatment or characterization, those parameters will be identified at a later date.			
<b>Liquids</b>		<b>Solids</b>	
a. pH (aqueous only): <input type="checkbox"/> < 2 <input type="checkbox"/> ≥ 12.5 <input type="checkbox"/> > 2 or < 12.5	Method: <input type="checkbox"/> NA <input checked="" type="checkbox"/> Exact	h. Asbestos: <input type="checkbox"/> NA If yes, is it friable? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	i. PCBs: If Yes, provide concentrations (actual & source) in composition table. <input type="checkbox"/> PCBs Bulk Product? (40 CFR 761.62)? <input type="checkbox"/> o. Sulfide ≥ 500 mg/kg <input type="checkbox"/> p. Cyanide ≥ 250 mg/kg
b. Flash Point: <input type="checkbox"/> NA	Method: <input type="checkbox"/> NA	j. Flammable Solid <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA <input type="checkbox"/> q. Oxidizer <input type="checkbox"/> r. Treatment Residue
c. Total suspended solids <1% <input type="checkbox"/> Is total organic carbon <1% <input type="checkbox"/> e. Fuming Acid/Acid Gases	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	k. Free liquids: If Yes, quantity volume % <input type="checkbox"/> l. RCRA Debris (~60 mm) (≥ 50% by visual inspection) or non-RCRA Rubble <input type="checkbox"/> m. Pyrophoric (Air Reactive)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA <input type="checkbox"/> s. Explosive <input type="checkbox"/> t. Radioactive <input type="checkbox"/> u. Halogens (Cl, F, Br)
g. Water Reactive	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA		
<b>All</b>			



**INEEL WASTE DETERMINATION & DISPOSITION FORM (WDDF)**  
**WORKING COPY**

Pg. 3 of 4  
3809 Q

<b>SECTION III WASTE DETERMINATION AND DISPOSITION</b> (Completed by the WGS Technical Specialist)	
<b>A. Waste Determination</b>	
1. Is this a solid waste (per 40 CFR 261.2)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (If No, attach regulatory citation)	
2. Is this a Hazardous Waste (per 40 CFR 261.3)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
3. Is waste excluded from regulation under 40 CFR 261.4? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Regulatory citation:	
4. Is waste subject to 40 CFR 268 regulations? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, is the waste a: <input type="checkbox"/> Waste Water or <input type="checkbox"/> Non Wastewater.	
Is there a specified method of treatment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, list the specified method:	
5. Is waste listed in Subpart D of 40 CFR 261? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If Yes, provide waste codes, regulated hazardous constituent(s), and an explanation of determination.) Attachment Included: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Codes:	
6. Is waste characteristic per Subpart C of 40 CFR 261? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If Yes, provide waste codes, regulatory subcategory, and an explanation of determination.) Attachment Included: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Codes:	
7. If hazardous, is the waste excluded for recycling in accordance with 40 CFR 261.2(e)(1)? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, regulatory Citation: NA	
8. Is the waste mixed or low level? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If Yes, include attachment with isotopic information.)	
9. Is waste TSCA regulated for either of the following? PCBs: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Asbestos: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<b>B. Evaluation of Underlying Hazardous Constituents (UHCs)</b>	
Does the waste require evaluation in accordance with 40 CFR 268.48? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If Yes, identify UHCs.) UHCs: Attachment Included: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<b>C. Disposition and Data Gap Evaluation: (Attachment Included: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No)</b>	
1. Proposed Disposition (storage, treatment, disposal pathway): CfA Landfill	
2. Will this waste be treated in a <90 storage area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If Yes, attach plan.) (Mixed and Hazardous Only)	
3. Is the information provided adequate for complete waste determination, management, transportation, treatment, and disposal of waste? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If No, identify additional information or analysis required.	
<b>D. Verification requirements: (Attachments Included: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No)</b>	
1. Will verification be performed on this waste? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, describe the verification to be performed. One time only.	
At initial Storage Location: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Immediately Prior to Shipment: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
2. What is the verification frequency? NA	

IN-EEL WASTE DETERMINATION & DISPOSITION FORM (WDDF)

**WORKING COPY** 3809 Q

**E. Packaging and Transportation Requirements (to be completed by P&T): Complete this section only if wastes ONLY transported.**

1. Is waste a DOT Regulated Hazardous Material? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If Yes: DOT Primary Hazard:	DOT Subsidiary Hazard:
2. Recommended Packaging:		
3. Probable Basic Description (PSN, Hazard Class, DOT ID #, PG):		
4. Other information (special shipping conditions, etc.):		
5. If containers are already generated, are they packaged correctly for the DOT hazard class? <input type="checkbox"/> Yes <input type="checkbox"/> No If No, list container required.		

Packaging & Transportation Name Typed/Printed	Packaging & Transportation Signature	Date
<b>Summary of Waste Determination:</b> <input type="checkbox"/> Hazardous (see codes listed above) <input type="checkbox"/> Mixed Low-Level (see codes listed above)	<input type="checkbox"/> Low-Level <input checked="" type="checkbox"/> Conditional <input type="checkbox"/> Industrial <input type="checkbox"/> Other (describe)	

**CERTIFICATIONS**

I certify that the information in Section III of this form and the applicable attachments are fully disclosed and accurate. A good faith effort has been put forward to acquire and verify the information. Willful or deliberate omissions have not been made, and all known and suspected hazards have, to the best of my knowledge, been identified.

Charlyss D. Lee WGS Technical Specialist Typed/Printed	Charlyss D. Lee WGS Technical Specialist Signature	4/30/03 Date
Mark V. Marchant WGS Independent Reviewer Typed/Printed	Mark V. Marchant WGS Independent Reviewer Signature	5-5-03 Date

Low Level Waste Hazardous Waste Determination Review Name Typed/Printed	Low Level Waste Hazardous Waste Determination Review Signature	Date
Additional Narrative Information (As Needed): Generation Rate is defined as "One - Time-Only", however, will require numerous bulk dump truck loads/trips to landfill over a several week time period. All shipped 5/7/03		
Updated on 7/1/03 to include Zone 2A after analytical data received. <i>Chase</i> 7/5/03		

# INEEL WASTE DETERMINATION & DISPOSITION FORM (WDDF) WORKING COPY ONLY

**General Instructions:**

**Waste Stream Name:** MLLW Soils from CFA-04 Pond

**WDDF Number (Optional):**

Material Profile Number: 3747Q

**Waste Stream Contacts**

Contact:	Name	E-Mail	Phone	Pager	MS	Contact:	Name	E-Mail	Phone	Pager	MS
Generator:	Deborah W. Waggoner	wigg	6-9989	7699	3950	Technical Specialist:	Charlyss D. Lee		6-9983	9049	4142
Facility Rep.:	Robert A. Lopez	r12	6-8008	6403	4142	Independent Reviewer:	Mark V. Marchant		6-1562	5095	8101

**SECTION I: PROCESS KNOWLEDGE EVALUATION** (Completed by the generator with assistance from the Facility Representative)

1. Waste Generation Location: Facility: CFA Building/Room: N/A Area: WAG-4 If applicable: Container #: Charge #;

2. Process and Waste Description: (Attachment Included:  Yes  No)

Soils generated from the remediation of CFA-04 pond. These soils are from zones 6a and 7a. These soils exceed the final remediation goal of 8.4 mg/kg and exceed the top level of 0.2 mg/L. The soils also contain trace amounts of radionuclides rendering the soils as MLLW.

3. Were any waste minimization activities a part of this process:  Yes  No (If Yes, provide description or reference.)  
Sitewide waste minimization plan

4. Generation Status:  Anticipated  Existing  Routine operations  Clean-up/Stabilization Activities  One Time Only  On-going  Secondary

5. Other generation information: N/A

6. Physical Description (check all that apply): Color:  Solid  Organic Liquid  Aqueous Liquid  Sludge  Aerosol  Gas Cylinder  Multi-Layered

7. Sources used for process evaluation (e.g. MSDS, operational logs, procedures, analyses): analytical

8. Waste Characteristics: Note: The waste characteristics may not be known at time of initial determination. If required for treatment or characterization, those parameters will be identified at a later date.

		Liquids		Solids		All											
a. pH (aqueous only):		Method:	<input checked="" type="checkbox"/> NA	h. Asbestos:		<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> NA	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> NA
<input type="checkbox"/> < 2	<input type="checkbox"/> ≥ 12.5	Exact		If yes, is it irritant?		<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> NA	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> NA	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> NA	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> NA
b. Flash Point:		Method:	<input checked="" type="checkbox"/> NA	i. Pyrophoric (Water Reactive)		<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> NA	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> NA
c. Total suspended solids <1%		<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> NA	j. Flammable Solid	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> NA	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> NA
d. Is total organic carbon <1%		<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> NA	k. Free liquids: If Yes, quantity	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> NA	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> NA	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> NA	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> NA
e. Fuming Acid/Acid Gases		<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> NA	volume %	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> NA	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> NA
f. Pyrophoric (Air Reactive)		<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> NA	l. RCRA Debris (>60 mm) ( $\geq$ 50% by visual inspection) or non-RCRA Rubble	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> NA	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> NA	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> NA
g. Water Reactive		<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> NA	m. Pyrophoric (Air Reactive)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> NA	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> NA	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> NA

INEEL WASTE DETERMINATION & DISPOSITION FORM (WDDF) WORKING COPY

ONLY

Material Profile Number: 3747Q

Waste Stream Name: MLLW Soils from CFA-04 Pond

9. Waste Composition: (Must total 100%). Attachment Included:  Yes  No  NA

Constituent	CAS No.	Analysis or PK	Range (If constituent is <1%, use mg/kg or mg/l, otherwise report in %)	From To	Units	Used as a Solvent? (Y/N)	Comments
soil	pk	100	100	%	N		

10. Radioisotopes: Are radioisotopes present?  Yes, If Yes, refer to attachment.  No, If No, include signed form 435-02

SECTION II: PROBABLE WASTE TYPE: (Completed by the Facility Representative and used to assign waste technical specialist and for appropriate management until final waste determination is made.)

Based on evaluation of the process and available data the waste type indicated is (check all that apply):

<input type="checkbox"/> Hazardous Only	<input checked="" type="checkbox"/> Mixed	<input type="checkbox"/> Radioactive Only	<input type="checkbox"/> Conditional Industrial	<input type="checkbox"/> Used Oil
<input type="checkbox"/> Material Exchange	<input type="checkbox"/> Lab Pack	<input type="checkbox"/> Non-conditional Industrial	<input type="checkbox"/> TSCA	<input type="checkbox"/> Other - Describe:
<input type="checkbox"/> Recyclable:	<input type="checkbox"/> Non Radioactive Lead (>99+ % Lead)	<input type="checkbox"/> Lead Batteries	<input type="checkbox"/> Silver	<input type="checkbox"/> RCRA Scrap metal

Indicated Waste Codes: D009

CERTIFICATION

I certify that the information in Section I of this form and the applicable attachments are fully disclosed. A good faith effort has been put forward to acquire and verify the information. Willful or deliberate omissions have not been made, and all known and suspected hazards have, to the best of my knowledge, been identified. The WGS Facility Representative, based on information provided, has assigned a probable waste type in Section II.

Deborah W. Wagner  
Generator Name  
Typed/Printed

4/23/2003  
Date

Robert A. Lopez  
WGS Facility Representative Name  
Typed/Printed

4/23/2003  
Date  
Signature  
WGS Facility Representative  
Signature

# INEEL WASTE DETERMINATION & DISPOSITION FORM (WDDF) WORKING COPY ONLY

<b>SECTION III. WASTE DETERMINATION AND DISPOSITION</b> (Completed by the WGS Technical Specialist)	
<b>A. Waste Determination</b>	
<p>1. Is this a solid waste (per 40 CFR 261.2)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (If No, attach regulatory citation)</p> <p>2. Is this a Hazardous Waste (per 40 CFR 261.3)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>3. Is waste excluded from regulation under 40 CFR 261.4? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Regulatory citation:</p> <p>4. Is waste subject to 40 CFR 266 regulations? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, is the waste a: <input type="checkbox"/> Waste Water or <input checked="" type="checkbox"/> Non Wastewater.</p> <p>5. Is there a specified method of treatment? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, list the specified method: <i>Alternative treatment methods 20849</i></p> <p>5. Is waste listed in Subpart D of 40 CFR 261? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If Yes, provide waste codes, regulated hazardous constituents, and an explanation of determination.)</p> <p>Attachment Included: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Codes: <i>S009</i></p>	
<p>6. Is waste characteristic per Subpart C of 40 CFR 261? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (If Yes, provide waste codes, regulatory subcategory, and an explanation of determination.)</p> <p>Attachment Included: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Codes: <i>S009</i></p>	
<p>7. If hazardous, is the waste excluded for recycling in accordance with 40 CFR 261.2(e)(1)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, regulatory Citation:</p> <p>8. Is the waste mixed or low level? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (If Yes, include attachment with isotopic information.)</p> <p>9. Is waste TSCA regulated for either of the following? PCBs: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Asbestos: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	
<b>B. Evaluation of Underlying Hazardous Constituents (UHCs)</b> <p>Does the waste require evaluation in accordance with 40 CFR 268.48? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (If Yes, identify UHCs) UHCs: <i>None identified</i></p>	
<b>C. Disposition and Data Gap Evaluation: (Attachment Included: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No)</b>	
<p>1. Proposed Disposition (storage, treatment, disposal pathway): <i>Treatment and disposal at TCSE</i> STP ID (mixed only): <i>ID-CEC4-A-mw</i></p> <p>2. Will this waste be treated in a &lt;90 storage area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If Yes, attach plan.) (Mixed and Hazardous Only)</p> <p>3. Is the information provided adequate for complete waste determination, management, transportation, treatment, and disposal of waste? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If No, identify additional information or analysis required.</p>	
<b>D. Verification Requirements: (Attachments Included: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No)</b>	
<p>1. Will verification be performed on this waste? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, describe the verification to be performed.</p>	
<p>2. What is the verification frequency? <i>NA</i></p>	
<p>At Initial Storage Location: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>Immediately Prior to Shipment: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	

**INEEL WASTE DETERMINATION & DISPOSITION FORM (WDDF) WORKING COPY  
ONLY**

E. Packaging and Transportation Requirements (to be completed by P&T): Complete this section only if wastes are to be transported.				
1. Is waste a DOT Regulated Hazardous Material? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes: DOT Primary Hazard:	DOT Subsidiary Hazard:			
2. Recommended Packaging:				
3. Probable Basic Description (PSN, Hazard Class, DOT ID #, PG):				
4. Other information (special shipping conditions, etc.):				
5. If containers are already generated, are they packaged correctly for the DOT hazard class? <input type="checkbox"/> Yes <input type="checkbox"/> No If No, list container required.				
Packaging & Transportation Name Typed/Printed	Packaging & Transportation Signature Date			
Summary of Waste Determination: <input type="checkbox"/> Hazardous (see codes listed above)	<input checked="" type="checkbox"/> Mixed Low-Level (see codes listed above)	<input type="checkbox"/> Low-Level	<input type="checkbox"/> Conditional	<input type="checkbox"/> Industrial <input type="checkbox"/> Other (describe)

**CERTIFICATIONS**

I certify that the information in Section III of this form and the applicable attachments are fully disclosed and accurate. A good faith effort has been put forward to acquire and verify the information. Willful or deliberate omissions have not been made, and all known and suspected hazards have, to the best of my knowledge, been identified.

<u>Charles D. Lee</u> WGS Technical Specialist Typed/Printed	<u>Charles D. Lee</u> WGS Technical Specialist Signature Date <u>4/30/03</u>
<u>Mark V. Meacham T</u> WGS Independent Reviewer Typed/Printed	<u>Mark V. Meacham T</u> WGS Independent Reviewer Signature Date <u>5-6-03</u>
Low Level Waste Hazardous Waste Determination Review Name Typed/Printed	Low Level Waste Hazardous Waste Determination Review Signature Date

Additional Narrative Information (As Needed):

## INEEL WASTE DETERMINATION & DISPOSITION FORM (WDDF)

# **WORKING COPY ONLY**

**General Instructions:**

**Waste Stream Name:** LLW Soils from CFA-04 Pond

**WDDF Number (Optional):** 3746Q

Charge #:

**Waste Stream Contacts:**

Contact:	Name	E-Mail	Phone	MS	Contact:	Name	E-Mail	Phone	Pager	MS
Generator:	Deborah W. Waggoner	wigg	6-9989	7699	3950	Technical Specialist:	Charlyss D. Lee	leecd	6-9983	9049
Facility Rep.:	Robert A. Lopez	rlz	6-8008	6403	4142	Independent Reviewer:	Mark V. Marchant	marvam	6-1562	5095

**SECTION I: PROCESS KNOWLEDGE EVALUATION** (Completed by the generator with assistance from the Facility Representative)

1. Waste Generation Location: Facility: CFA Building/Room: N/A Area: WAG-4 If applicable: Container #: \_\_\_\_\_

2. Process and Waste Description: (Attachment included:  Yes  No)

Soils generated from the remediation of CFA-04 pond. These soils are from zones 5, 6, 7, and 8 excluding the zones 6a and 7a. These soils exceed the final remediation goal of 8.4 mg/kg but do not exceed the total level of 0.2 mg/L. The soils also contain trace amounts of radionuclides rendering the soils as LLW.

3. Were any waste minimization activities a part of this process:  Yes  No (If Yes, provide description or reference)  
Sitewide waste minimization plan

4. Generation Status:  Anticipated  Existing  Routine operations  Cleanup/Stabilization Activities  One Time Only  On going  Secondary

5. Other generation information: N/A

6. Physical Description (check all that apply): Color:  Solid  Organic Liquid  Aqueous Liquid  Sludge  Aerosol  Gas Cylinder  Multi-Layered

7. Sources used for process evaluation (e.g. MSDS, operational logs, procedures, analyses): analytical

8. Waste Characteristics: Note: The waste characteristics may not be known at time of initial determination. If required for treatment or characterization, those parameters will be identified at a later date.

Liquids	Solids				All			
a. pH (aqueous only):	<input type="checkbox"/> < 2	<input type="checkbox"/> ≥ 12.5	<input type="checkbox"/> NA	<input checked="" type="checkbox"/> Method:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	<input type="checkbox"/> n. PCBs: If Yes, provide concentrations (actual & source) in composition table.
b. Flash Point:	<input type="checkbox"/> > 2 or < 12.5	<input checked="" type="checkbox"/> Exact	<input type="checkbox"/> NA	<input type="checkbox"/> Method:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	<input type="checkbox"/> PCBs Bulk Product? (40 CFR 76.62)?
c. Total suspended solids <1%	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> NA	<input type="checkbox"/> i. Pyrophoric (Water Reactive)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	<input type="checkbox"/> o. Sulfide ≥ 500 mg/kg
d. Is total organic carbon <1%	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> NA	<input type="checkbox"/> j. Flammable Solid	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	<input type="checkbox"/> p. Cyanide ≥ 250 mg/kg
e. Fuming Acid/Acid Gases	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> NA	<input type="checkbox"/> k. Free liquids: If Yes, quantity	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	<input type="checkbox"/> q. Oxidizer?
f. Pyrophoric (Air Reactive)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> NA	<input type="checkbox"/> l. RCRA Debris (>60 mm) ( $\geq 50\%$ by visual inspection) or non-RCRA Rubble	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	<input type="checkbox"/> r. Treatment Residue
g. Water Reactive	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> NA	<input type="checkbox"/> m. Pyrophoric (Air Reactive)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	<input type="checkbox"/> s. Explosive
					<input type="checkbox"/> t. Radioactive	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA
					<input type="checkbox"/> u. Halogens (Cl, F, Br)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA

INEEL WASTE DETERMINATION & DISPOSITION FORM (WDDF)

**WORKING COPY**  
**Material Profile Number: ONLY**

Waste Stream Name: LLW Soils from CFA-04 Pond

9. Waste Composition: (Must total 100%). Attachment Included:		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> NA
Constituent	CAS No.	Analysis or PK	(If constituent is <1%, use mg/kg or mg/l, otherwise report in %)	Range Units
soil	pk	100	100	% N

10. Radioisotopes: Are radioisotopes present?  Yes, If Yes, refer to attachment  No, If No, include signed form 435.02

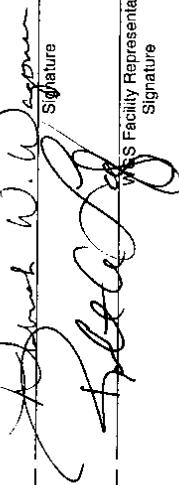
**SECTION II: PROBABLE WASTE TYPE:** (Completed by the Facility Representative and used to assign waste technical specialist and for appropriate management until final waste determination is made.)

Based on evaluation of the process and available data the waste type indicated is (check all that apply):

<input type="checkbox"/> Hazardous Only	<input type="checkbox"/> Mixed	<input checked="" type="checkbox"/> Radioactive Only	<input type="checkbox"/> Conditional Industrial	<input type="checkbox"/> Used Oil
<input type="checkbox"/> Material Exchange	<input type="checkbox"/> Lab Pack	<input type="checkbox"/> Non-conditional Industrial	<input type="checkbox"/> TSCA	<input type="checkbox"/> Other - Describe:
<input type="checkbox"/> Recyclable:	<input type="checkbox"/> Non Radioactive Lead (>99+ % Lead)	<input type="checkbox"/> Lead Batteries	<input type="checkbox"/> Silver	<input type="checkbox"/> RCRA Scrap metal
			<input type="checkbox"/>	<input type="checkbox"/> Other - Describe:
Indicated Waste Codes: N/A				

**CERTIFICATION**

I certify that the information in Section I of this form and the applicable attachments are fully disclosed. A good faith effort has been put forward to acquire and verify the information. Willful or deliberate omissions have not been made, and all known and suspected hazards have, to the best of my knowledge, been identified. The WGS Facility Representative, based on information provided, has assigned a probable waste type in Section II.

Deborah W. Waggoner Generator Name Typed/Printed	 Signature	<u>4/23/2003</u> Date
Robert A. Lopez WGS Facility Representative Typed/Printed	 Signature	<u>4/23/2003</u> Date

**INEEL WASTE DETERMINATION & DISPOSITION FORM (WDDF) WORKING COPY ONLY**

<b>SECTION III: WASTE DETERMINATION AND DISPOSITION</b> (Completed by the INEEL Technical Specialist)	
<b>A. Waste Determination</b>	
1. Is this a solid waste (per 40 CFR 261.2)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (If No, attach regulatory citation)
2. Is this a Hazardous Waste (per 40 CFR 261.31)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3. Is waste excluded from regulation under 40 CFR 261.4? If Yes, Regulatory citation:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
4. Is waste subject to 40 CFR 268 regulations? If Yes, is the waste a: <input type="checkbox"/> Waste Water or <input type="checkbox"/> Non Waste water.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Is there a specified method of treatment? If Yes, list the specified method:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
6. Is waste listed in Subpart D of 40 CFR 261? If Yes, provide waste codes, regulated hazardous constituent(s), and an explanation of determination.) Attachment Included: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Codes:	
7. If hazardous, is the waste excluded for recycling in accordance with 40 CFR 261.2(e)(1)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If Yes, provide waste codes, regulatory subcategory, and an explanation of determination.) Attachment Included: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Codes:
8. Is the waste mixed or low level? If Yes, <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If Yes, include attachment with isotopic information.)	
9. Is waste TSCA regulated for either of the following? PCBs: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No   Asbestos: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<b>B. Evaluation of Underlying Hazardous Constituents (UHCs)</b>	
Does the waste require evaluation in accordance with 40 CFR 263.48?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If Yes, identify UHCs)   UHCs: _____ Attachment included: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>C. Disposition and Data Gap Evaluation: (Attachment Included: <input type="checkbox"/> Yes   <input checked="" type="checkbox"/> No)</b>	
1. Proposed Disposition (storage, treatment, disposal pathway):	<i>Disposal at INDF</i>
2. Will this waste be treated in a <90 storage area? If Yes, <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If Yes, attach plan.) (Mixed and Hazardous Only)	
3. Is the information provided adequate for complete waste determination, management, transportation, treatment, and disposal of waste? If Yes, <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If No, identify additional information or analysis required.	
<b>D. Verification requirements: (Attachments Included: <input type="checkbox"/> Yes   <input checked="" type="checkbox"/> No)</b>	
1. Will verification be performed on this waste? If Yes, <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, describe the verification to be performed.	
2. What is the verification frequency? <i>NA</i>	
At Initial Storage Location: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Immediately Prior to Shipment: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No



**Attachment B2**

**Summary of CFA-04 Prefinal Inspection**



## **Attachment B2**

### **Summary of CFA-04 Prefinal Inspection**

October 16, 2003, 2 PM

Wayne Pierre	EPA	Ted Livieratos	DEQ
Mark Shaw	DOE	Doug Jorgensen	BBWI
Scott Reno	BBWI	Deborah Wagoner	BBWI
John Giles	BBWI		

Action Items:

1. BBWI will provide survey results on area in Zone 6 near Sampling Point 6-3. EPA did not believe that the excavated area is 10 ft deep or at basalt. EPA said that this is a quality assurance check on how the excavation went.
2. BBWI will email photos to EPA and DEQ that were taken during the inspection.
3. BBWI will provide a printout of the last calibration of the field Atomic Absorption (AA) instrument.

The above participants walked the excavated CFA-04 mercury pond after mercury-contaminated soil and asbestos-containing material were removed per the RD/RA Work Plan<sup>a</sup>. Eleven pictures were taken during the inspection, and one picture of the AA that was taken yesterday can be used for the record of the inspection.

EPA said that the response to the action items would complete the prefinal inspection.

Questions were answered as follows:

- BBWI explained that samples were taken below the pipe and inside the pipe.
- BBWI explained that the last asbestos was removed from the southwest corner of the pond today (10-16-03).
- BBWI explained that the orange on the sidewall marked where a sample had been taken to determine the lateral extent of the contamination.
- BBWI said that a suitability determination was in the files for the asbestos that was disposed of at the CFA Landfills in response to EPA's question.
- BBWI pointed out that the south side of the pond was excavated and hauled to the CFA Landfills because it was nonradioactive. The north side soil was slightly radioactive and was hauled to the ICDF. This was in response to DEQ's questions.

---

a. DOE-ID, 2003, *Waste Area Group 4 Remedial Design/Remedial Action Work Plan, CFA-04 Pond Mercury-Contaminated Soils, Operable Unit 4-13*, DOE/ID-11028, Rev. 0, February 2003.

- BBWI explained that turnaround on sample analysis was very quick. EPA pointed out that the field samples were opportunity-biased samples, not random samples. BBWI indicated that the QC samples were taken randomly per the procedure in the Field Sampling Plan.<sup>b</sup>
- BBWI pointed out that the effluent line came from Building CFA-674, located across the parking lot to the north.
- BBWI explained that laboratory safety is covered by a Job Safety Analysis. Calibration of the field AA is done daily, and analysis was done per the procedures in the instrument operating manual.
- BBWI explained that there was no maintenance log and that the AA was sent to the manufacturer for cleaning prior to use on the CFA-04 remedial action.

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b. DOE-ID, 2003, *Field Sampling Plan for the Central Facilities Area-04 Pond Remedial Action*, DOE/ID-11024, Rev. 0, February 2003.

## **Attachment B3**

### **Responses to EPA/DEQ Requests for Information during the Prefinal Inspection**



## **Attachment B3.1**

### **Logbook Entry**



10/6/03 Cont.

- 17:38 Loading Truck 3440/3455, ICDFO4030375.  
ICDFO4030375 loaded; sent for tarping.  
- 1/2 load left @ zone 8, moving to NW area of zone 8 to remove soil to basalt. Rallin than make road, will haul w/ loader to South of zone 8 for loading.
- 18:11 Loading Truck 3441/can 3446, ICDFO4030376. Using loader; excavator is clearing material down to rock in 1' along bank. Loader is loading truck.
- 18:36 ICDFO4030376 loaded; sent for tarping.  
Continuing to load using loader/excavator. Loading Truck 3440/can 3447 / ICDFO4030377.
- 4:02 Loading Truck 3440/3465, ICDFO4030378
- 4:15 ICDFO4030377/378 loaded; sent for tarping.
- 4:29 Loading Truck 3441/can 3446, ICDFO4030379.  
Note: Completed all of zone 8, 7, : working in two small areas in 6. Awaiting continuation supply in those areas. Removed soil to basalt in 8-12'. Small amount from back of zone 7.
- 4:45 ICDFO4030379 loaded; sent for tarping. Removed soil to basalt in 6-3'.  
- Moving to north of zone 5. Will remove 2-3' on north boundary. Removed small amount from supply area 6-2. Example.  
- Mixing soil w/ water in zone 5 north boundary.
- 5:15 Loading Truck 3442/can 3447, ICDFO4030380.  
- Trucks loaded before lunch : 7  
- Trucks loaded to ICDF : 13
- 5:20 Water truck is empty, waiting for it to return.
- 5:47 ICDFO4030380 loaded; sent for tarping.
- 5:49 Loading Truck 3440/can 3465, ICDFO4030381
- 5:55 ICDFO4030381 loaded. Sent for tarping.
- 5:58 Loading truck 3441/can 3446, ICDFO4030382.
- 6:05 ICDFO4030382 loaded; sent for tarping.
- 16 Total loads sent to ICDF, 300000 boxes quantity transferred. 310 Tons per day.



## **Attachment B3.2**

### **Prefinal Inspection Pictures**





Figure B3.2-1. Looking west at profile of asbestos material adjacent to Zone 8.



Figure B3.2-2. Looking northwest at Zone 8.



Figure B3.2-3. Looking east across basalt dome in Zone 7.

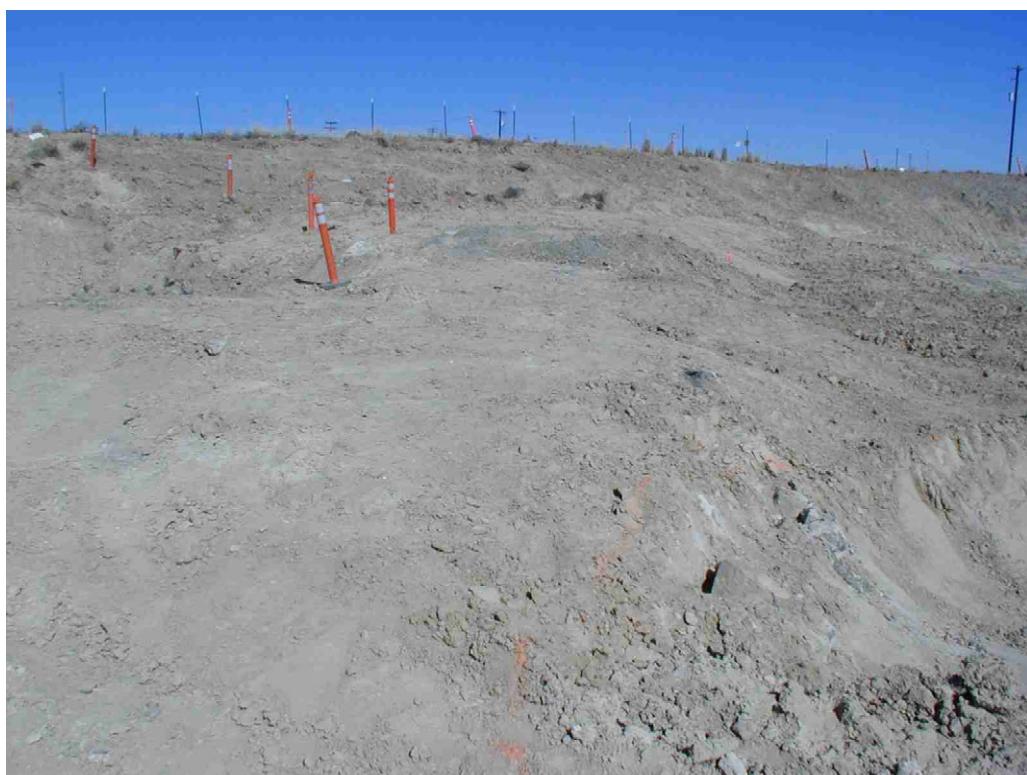


Figure B3.2-4. Looking east along basalt ridge in Zone 8.



Figure B3.2-5. Exposed basalt on top of dome in Zone 7.



Figure B3.2-6. Looking east from Zone 7 across Zone 6.



Figure B3.2-7. Exposed basalt profile on north boundary of Zone 6.



Figure B3.2-8. Looking north along Zone 5 with building CF-674 in background.



Figure B3.2-9. Piece of clay inlet pipe with gray residue.



Figure B3.2-10. Looking from Zone 11 into Zones 13 and 14.



Figure B3.2-11. Looking northeast at basalt ridge and rubble in Zones 13 and 14.



Figure B3.2-12. Looking northwest at pond inlet with building CF-674 in background.



Figure B3.2-13. Building CF-674 with road and parking area in foreground.



Figure B3.2-14. Asbestos material removal in area adjacent to Zone 8.

